5

ABSTRACT

The present invention is directed to a dispersion of polymer particles in a dispersing medium. The polymer particles each contain an average of more than two living radicals that are not chemically protected. The present invention is also directed to a free radical precipitation process involving combining at least one monomer in at least one solvent; dispersing said monomer solvent mixture in a dispersing medium that is non-miscible with the first solvent, using a surfactant, stabilizer or mixture thereof; initiating polymerization with at least one free-radical generating agent and conversion, to produce polymer particles containing radicals trapped by precipitation by virtue of being above the lower critical solution temperature of the system; and removing the precipitating agent either during or after free-radical generation to form a dispersion polymer in the dispersing medium having living, trapped radicals.